



UNITED STATES PATENT AND TRADEMARK OFFICE

CA

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/950,963	10/15/1997	JOEL A. DREWES	074022-3302	9997
30542	7590	05/31/2005	EXAMINER	
FOLEY & LARDNER			MARSCHEL, ARDIN H	
P.O. BOX 80278			ART UNIT	
SAN DIEGO, CA 92138-0278			PAPER NUMBER	
			1631	

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/950,963

Applicant(s)

DREWES ET AL.

Examiner

Ardin Marschel

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2005 and 14 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12,18,19,23,25-34 and 36-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 39-50 is/are allowed.
- 6) ☒ Claim(s) 1-7,9,18,19,23,25,26,36,37 and 51-54 is/are rejected.
- 7) ☒ Claim(s) 8,10-12,27-34,38 and 55-62 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. (3 copies).
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

128

DETAILED ACTION

The amendments, filed 1/5/05 and 4/14/05, have overcome previous rejections/objections of record. Unfortunately, upon reconsideration the following rejections are newly applied. The amendments, filed 1/5/05 and 4/14/05, have been entered. Due to the newly applied rejections hereinunder summarized the finality of the office action, mailed 11/30/04, is hereby withdrawn. The response time restarts as of the mailing date of this office action.

Applicants' arguments, filed 1/5/05 and 4/14/05, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

PRIOR ART

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(f) he did not himself invent the subject matter sought to be patented.

Claims 1, 23, and 36 are rejected under 35 U.S.C. 102(e)(2) as being clearly anticipated by Winkler et al. (P/N 6,849,462).

Winkler et al. discloses the devices with flow channels therein in column 10, lines 38-67, and generally are summarized in column 2, line 27, through column 3, line 58. The surface of the devices of Winkler et al. are disclosed in column 14, line 41, through column 15, line 4, wherein photo-reactions etch the surface for attachment of monomers to make polymer receptive layers thereon. Detection via mass addition of analyte (all with mass) is set forth in column 29, lines 18-32, and column 30, line 36, through column 32, line 16, describing the optically functional layer character of the device. These disclosures anticipate the basic composition as listed in the above instant claims.

Claims 1-7, 9, 18, 19, 23, 25, 26, 36, 37, and 51-54 are rejected under 35 U.S.C. 102(b) and (e)(2) as being clearly anticipated by Miller et al. (P/N 5,418,136).

Instant claim 23 is directed to a composition comprising a support comprising channels or a porous support with an optically functional layer containing channels positioned on said support which detectably responds to mass alteration thereupon wherein the channels in the optically functional layer allows fluid flow to the support either through channels or pores in the support.

In Miller et al. in column 39, lines 1-8, a multiple pedestal device is described wherein wash solution and excess sample, reasonably fluids as instantly claimed, is allowed to flow to the support either via space between pedestals or via porous nature of a pedestal support. This anticipates the fluid flow limitations of instant claim 23. Each and every pedestal in the Miller et al. disclosure contains a mass responsive

Art Unit: 1631

analyte detectable layer as summarized generally in column 6, line 59, through column 7, line 16. The pedestals of the multi-pedestal device of column 39, lines 1-8, thus support segments of an optically functional layer in such a device with either channels between the pedestals or pores in the support thus anticipating instant claim 23. The complete devices of Miller et al. are all depicted in Figures 8B, 8D - 8G, 10, 11, and 12 as such pedestal type devices onto which are layers as instantly claimed also in other instant claims such as claim 1 wherein attachment and analyte specific layers are also described, such as in column 30, lines 40-61. These options regarding layering are also claimed in instant claims 1-6. In Miller et al., in column 11, line 30, through column 15, line 68, these other options as instantly claimed are disclosed as clear options. It is noted that the instant claims taken as a whole correspond to all of these options in Miller et al. thus anticipating them also. An absorbent pad surrounds each pedestal as described in column 39, lines 5-8, as also required in instant claim 9 and also provides nonspecific capture of analyte as required in instant claim 52, for example. Optically functional particles are also disclosed in Miller et al. in column 17, lines 38-48, as required in instant claim 25. Supports of silicon nitride on amorphous carbon is disclosed in column 20, lines 52-63, as also required in instant claim 37. Analytes as in instant claim 36 are summarized in Miller et al. in column 28, lines 41-65.

Claims 1-7, 9, 18, 19, 23, 25, 26, 36, 37, and 51-54 are rejected under 35 U.S.C. 102(f) as being previously invented by Miller et al. (P/N 5,418,136).

The above summary of the instant invention under the prior art rejection based on 35 U.S.C. 102(b) and (e)(2) supports this rejection based on the different inventive entites between Miller et al. and the instant application, albeit commonly assigned.

COMMON ASSIGNEE IS NOTED

The applied reference (Miller et al.) has a common ASSIGNEE with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e)(2). This rejection under 35 U.S.C. 102(e)(2) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

CLAIM OBJECTIONS

Claims 8, 10-12, 27-34, 38, and 55-62 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The disclosure is objected to because of the following informalities:

Claim 11, line 4, seems to be missing the word "on" in the phrase "positioned a layer".

Appropriate correction is required.

Claims 39-50 are allowed.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the Central PTO Fax Center. The faxing of such papers must conform with the notices

Art Unit: 1631

published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The Central PTO Fax Center number is (571) 273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., AU 1631 Supervisory Patent Examiner, whose telephone number is (571) 272-0718. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instrument Examiner, Tina Plunkett, whose telephone number is (571) 272-0549.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 26, 2005


ARDIN H. MARSCHEL
PRIMARY EXAMINER